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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/675,322

09/29/2003

Shoichi Kan

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5284

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11/20/2006

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EXAMINER

LIANG, LEONARD S

ART UNIT

PAPER NUMBER

2853

DATE MAILED: 11/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/675,322

Applicant(s)

KAN ET AL.

Examiner

Leonard S. Liang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-9 and 11-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4-9, 11-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

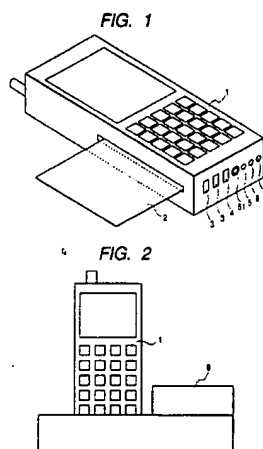
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4-5, 9-11, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ando (US Pat 6742887) in view of Zurio et al (US Pat 5898932).

Ando discloses:

- {claim 1} An image forming apparatus (figure 1-2); a battery for driving the image forming apparatus, charging means for charging the battery (figure 1, reference 3; figure 2, reference 8; column 4, lines 20-34); the image forming apparatus being containable in a separate container stand such as a place stand, the battery being charged by containing the image forming apparatus in the container stand when not used and chargeable if the image forming apparatus is contained in the container stand in a predetermined direction or in a direction opposite to the predetermined direction (figure 2, reference 8; column 4, lines 20-34), the charging means being mounted to the image forming apparatus and having a plurality of contact point portions and the container stand having a plurality of contact terminal portions in a predetermined combination for charging the battery when the image forming apparatus mounting the charging means is contained in the container stand in a predetermined direction (figure 1-2); wherein each of the contact terminal portions is in contact with any of the

contact point portions in a predetermined combination to charge the battery when the image forming apparatus is contained in the container stand in a predetermined direction (figure 1-2)



- {claims 4 and 11} wherein the battery and the charging means are incorporated in a charging device structured to be attachable to and detachable from the image forming apparatus, and the charging of the battery is conducted by containing in the container stand the charging device in the status of being mounted on the image forming apparatus (column 2, lines 30-67)
- {claim 5} wherein on the backside of the charging device, the contact point portion is provided, and the contact terminal portion is provided for the container stand, and the contact point portion and the contact terminal portion are electrically connected by containing the image forming apparatus having the charging device mounted thereon in the container stand (figure 1, reference 3; defining antennae side to be front side; column 4, lines 20-37)
- {claim 9} wherein the charging device is provided with a portion to hide the DC jack for input use for the image forming apparatus, and when the image forming

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apparatus having the charging device mounted thereon is contained in the container stand, the structural portion of the container stand covers the jack for DC input use of the charging device (figure 1-2, reference 3 represents DC jack; notice DC jack is hidden when placed in charging stand 8)

- {claim 10} wherein the battery is incorporated in the image forming apparatus, and the charging means is incorporated in the container stand, and the battery is charged when the image forming apparatus is contained in the container stand (column 2, lines 30-67)
- {claim 16} wherein the indication means for showing the charging condition of the battery is recognizable even when the image forming apparatus is contained in the container stand in any direction, forward or backward, and the contact point portion and the contact terminal portion are electrically connectable (figure 4, reference 8; column 5, line 51-column 6, line 11)

Ando differs from the claimed invention in that it does not disclose:

- {claim 1} each of the contact terminal portions is in contact terminal portions is in contact with any of the contact point portions to charge the battery in a combination different from the predetermined combination when the image forming apparatus mounting the charging means is contained in the container stand in a direction opposite to the predetermined direction

Zurio et al discloses a cellular phone whose charging stand has contact terminal portions are arranged in such a manner that they would mate with the phone's contact point portions regardless of the orientation in which the phone is inserted into the charging stand. This is

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because, unlike Ando, the contact point portions on the device and the contact terminal portions on the charging stand are arranged symmetrically. In such a scenario, it would not matter if you contacted the point portions with the terminal portions in a predetermined direction or in a direction opposite to the predetermined direction. Such a teaching is not new to one of ordinary skill in the art. Just for illumination purposes, please see the teaching reference of Nocker (US Pat 6236486), which discloses a symmetrical data contact point portion and a data contact terminal portion (figure 3, 4A). Please also see the teaching reference of Wiegand et al (US Pat 5138351), which discloses a battery charging apparatus for a camera that has a symmetrical arrangement of contact pins 15 and 17 with conductor pins 25 and 27.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teachings of Zurio et al into the invention of Ando. The motivation for the skilled artisan in doing so is to gain the benefit of simplicity and flexibility in the design of where to place contact portions for charging a device.

Claims 6-8 and 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ando (US Pat 6742887) in view of Zurio et al (US Pat 5898932), as applied to claims 1, 4-5, 9-11, and 16 above, and further in view of Saji (US Pat 5479486).

Ando, as modified, discloses, with respect to claims 6-8 and 12-15, an image forming apparatus (as applied to claims 1-5, 9-11, and 16 above).

Ando, as modified, differs from the claimed invention in that it does not disclose:

- {claims 6 and 12} wherein the contact point portion of the charging device, and the contact terminal portion of the container stand are arranged in the central

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portion of the connecting surface of the charging device and the container stand, respectively, and are in a symmetrical mode

- {claims 7 and 13} wherein the cradle is provided with a shutter mechanism for protecting the contact terminal portion, and the shutter mechanism retracts by containing the image forming apparatus having the charging device mounted thereon in the container stand
- {claim 8} wherein the load required for pressurizing the contact terminal portion to be in contact and retracting the shutter mechanism is smaller than the weight of the charging device alone
- {claim 14} wherein the load required for pressurizing the contact terminal portion to be in contact and retracting the shutter mechanism is smaller than the weight of the image forming apparatus
- {claim 15} wherein either the charging device or the image forming apparatus is provided with indication means for showing the charging condition of the battery, and the indication means is structured to be recognizable even when the image forming apparatus is contained in the container stand

Saji discloses:

- {claims 6 and 12} wherein the contact point portion of the charging device, and the contact terminal portion of the container stand are arranged in the central portion of the connecting surface of the charging device and the container stand, respectively, and are in a symmetrical mode (figure 4, reference 1, 6)

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- {claims 7 and 13} wherein the cradle is provided with a shutter mechanism for protecting the contact terminal portion, and the shutter mechanism retracts by containing the image forming apparatus having the charging device mounted thereon in the container stand (figure 4, reference 1, 6; column 4, lines 32-39)
- {claim 14} wherein the load required for pressurizing the contact terminal portion to be in contact and retracting the shutter mechanism is smaller than the weight of the image forming apparatus (column 4, lines 32-39)
- {claim 15} wherein either the charging device or the image forming apparatus is provided with indication means for showing the charging condition of the battery, and the indication means is structured to be recognizable even when the image forming apparatus is contained in the container stand (figure 4, reference 8)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teachings of Saji into the invention of modified Ando et al. The motivation for the skilled artisan in doing so is to gain the benefit of having a compact aesthetically pleasing charging stand. The combination naturally suggests that the load required for pressurizing the contact terminal portion to be in contact and retracting the shutter mechanism is smaller than the weight of the charging device alone (because the weight of the charging device is inherently larger than the weight of the image forming apparatus/phone being charged. If this were not the case, the stand would not be able to support the weight of the image forming apparatus/phone).

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Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ando (US Pat 6742887) in view of Zurio et al (US Pat 5898932), as applied to claims 1, 4-5, 9-11, and 16 above, and further in view of Silverbrook et al (US Pat 6290349).

Ando, as modified, discloses, with respect to claim 17, an image forming apparatus (as applied to claims 1-5, 9-11, and 16 above).

Ando, as modified, differs from the claimed invention in that it does not disclose wherein a recording sheet supply tray dually functioning as a cover capable of being open and closed with respect to the image forming apparatus is structured not to open when the image forming apparatus is contained in the container stand.

Silverbrook et al discloses wherein a recording sheet supply tray dually functioning as a cover capable of being open and closed with respect to the image forming apparatus is structured not to open when the image forming apparatus is contained in the container stand (figure 3, reference 607; when phone is in normal closed position).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teachings of Silverbrook into the invention of modified Ando. The motivation for the skilled artisan in doing so is to gain the benefit of having a media pack so that sheets don't have to be individually loaded to the printer assembly.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ando (US Pat 6742887) in view of Zurio et al (US Pat 5898932), as applied to claims 1, 4-5, 9-11, and 16 above, and further in view of Bork (US Pat 6255800).

Ando, as modified, discloses, with respect to claim 18, an image forming apparatus (as applied to claims 1-5, 9-11, and 16 above).

Ando, as modified, differs from the claimed invention in that it does not disclose wherein the image forming apparatus can be contained in the container stand in the status having an I/F cable connected thereto.

Bork discloses wherein the image forming apparatus can be contained in the container stand in the status having an I/F cable connected thereto (figure 17).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teachings of Bork into the invention of modified Ando. The motivation for the skilled artisan in doing so is to gain the benefit of being able to receive and transmit information to a computer.

Response to Arguments

Applicant's arguments with respect to claims 1, 4-9, and 11-19 have been considered but are moot in view of the new ground(s) of rejection. Even though this action is made in response to the applicant's amendments to the claims based on a legitimate non-final rejection, the examiner will still make this action non-final because this is the first time, since the RCE filed on 12/28/05 that the examiner can properly examine these amended claims.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonard S. Liang whose telephone number is (571) 272-2148. The examiner can normally be reached on 8:30-5 Monday-Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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